

Layer (type)	Output Shape	Param #
input_1 (InputLayer)	(None, 1)	0
lambda_1 (Lambda)	(None, 512)	0
dense_1 (Dense)	(None, 128)	65664
dropout_1 (Dropout)	(None, 128)	0
dense_2 (Dense)	(None, 1)	129
Total params: 65,793		
Trainable params: 65,793		
Non-trainable params: 0		

Train on 90000 samples, validate on 60000 samples

Epoch 1/20
90000/90000 [=====] - 232s 3ms/step - loss: 0.3536 - acc: 0.8446 - val_loss: 0.3272 - val_acc: 0.8565
Epoch 2/20
90000/90000 [=====] - 234s 3ms/step - loss: 0.3230 - acc: 0.8594 - val_loss: 0.3157 - val_acc: 0.8623
Epoch 3/20
90000/90000 [=====] - 234s 3ms/step - loss: 0.3113 - acc: 0.8653 - val_loss: 0.3069 - val_acc: 0.8669
Epoch 4/20
90000/90000 [=====] - 227s 3ms/step - loss: 0.3030 - acc: 0.8690 - val_loss: 0.3055 - val_acc: 0.8672
Epoch 5/20
90000/90000 [=====] - 228s 3ms/step - loss: 0.2956 - acc: 0.8745 - val_loss: 0.2955 - val_acc: 0.8726
Epoch 6/20
90000/90000 [=====] - 226s 3ms/step - loss: 0.2881 - acc: 0.8777 - val_loss: 0.2922 - val_acc: 0.8748
Epoch 7/20
90000/90000 [=====] - 225s 2ms/step - loss: 0.2822 - acc: 0.8812 - val_loss: 0.2866 - val_acc: 0.8782
Epoch 8/20
90000/90000 [=====] - 224s 2ms/step - loss: 0.2771 - acc: 0.8836 - val_loss: 0.2834 - val_acc: 0.8791
Epoch 9/20
90000/90000 [=====] - 224s 2ms/step - loss: 0.2716 - acc: 0.8855 - val_loss: 0.2797 - val_acc: 0.8812
Epoch 10/20
90000/90000 [=====] - 223s 2ms/step - loss: 0.2658 - acc: 0.8893 - val_loss: 0.2769 - val_acc: 0.8825
Epoch 11/20
90000/90000 [=====] - 227s 3ms/step - loss: 0.2613 - acc: 0.8916 - val_loss: 0.2729 - val_acc: 0.8840
Epoch 12/20
90000/90000 [=====] - 226s 3ms/step - loss: 0.2566 - acc: 0.8937 - val_loss: 0.2755 - val_acc: 0.8837
Epoch 13/20
90000/90000 [=====] - 223s 2ms/step - loss: 0.2506 - acc: 0.8959 - val_loss: 0.2704 - val_acc: 0.8875
Epoch 14/20
90000/90000 [=====] - 223s 2ms/step - loss: 0.2468 - acc: 0.8991 - val_loss: 0.2645 - val_acc: 0.8894
Epoch 15/20
90000/90000 [=====] - 223s 2ms/step - loss: 0.2429 - acc: 0.8993 - val_loss: 0.2659 - val_acc: 0.8895
Epoch 16/20
90000/90000 [=====] - 223s 2ms/step - loss: 0.2387 - acc: 0.9024 - val_loss: 0.2570 - val_acc: 0.8934
Epoch 17/20
90000/90000 [=====] - 223s 2ms/step - loss: 0.2342 - acc: 0.9038 - val_loss: 0.2558 - val_acc: 0.8939
Epoch 18/20
90000/90000 [=====] - 224s 2ms/step - loss: 0.2304 - acc: 0.9051 - val_loss: 0.2508 - val_acc: 0.8958
Epoch 19/20
90000/90000 [=====] - 225s 2ms/step - loss: 0.2270 - acc: 0.9078 - val_loss: 0.2499 - val_acc: 0.8976
Epoch 20/20
90000/90000 [=====] - 223s 2ms/step - loss: 0.2222 - acc: 0.9100 - val_loss: 0.2486 - val_acc: 0.8988
50000/50000 [=====] - 70s 1ms/step

Test score: 0.21568876795768738

Test accuracy: 0.91508

